

IN THE CLAIMS

Claim 9 (previously amended) - Autologous thrombin, prepared using ethanol, which provides fast clotting in less than five seconds and is stable for more than fifteen minutes.

Claim 10 (previously amended) - A composition for extracting thrombin from plasma consisting essentially of:

unadulterated Plasma;

Ethanol (ETOH), present at a concentration between about 8% and about 20% volume per unit volume; and

CaCl_2 .

Claim 11 (original) - The composition of claim 10 wherein ETOH is present at 18.9% and CaCl_2 is present at 23.0 mM both by volume in final concentration.

Claim 12 (original) - The composition of claim 10 wherein ETOH is present at 18.9% and CaCl_2 is present at 5.7 mM both by volume in final concentration.

Claim 13 (previously amended) - The composition of claim 10 wherein CaCl_2 is present at a range between 4.5 mM and 23.0 mM by volume in final concentration.

Claim 17 (original) - A device for preparing thrombin from plasma, comprising:

a reaction chamber having a solution of CaCl_2 and ETOH therein;

means for admitting unadulterated plasma into said reaction chamber;

a thrombin receiving syringe coupled to said reaction chamber to receive the thrombin; and

a filter located between said reaction chamber and said thrombin receiving syringe.

Claim 18 (original) - A single donor biological glue processing device, comprising, in combination:

a thrombin processing means,

a clotting and adhesive proteins processing means operatively coupled to said thrombin processing means,

means for receiving plasma via said operative coupling for subsequent conversion of the plasma to, respectively thrombin in said thrombin processing means and clotting and adhesive proteins in said clotting and adhesive proteins processing means.

Claim 19 (original) - A device for preparing thrombin from plasma, comprising:

a reaction chamber having ceramic beads or borosilicate glass therein;

means for admitting a reagent into said reaction chamber;

means for admitting plasma into said reaction chamber;

a thrombin receiving syringe coupled to said reaction chamber to receive the thrombin; and

a filter located between said reaction chamber and said thrombin receiving syringe.

Claim 20 (original) - The device of claim 19 wherein the reagent includes CaCl_2 and ETOH solution.

Claim 22 (previously amended) - A composition for extracting thrombin from plasma consisting essentially of:

plasma;

ethanol (ETOH), present at a concentration between about 8% and about 20% volume per unit volume;

CaCl_2 ; and

glass beads.

Claim 23 (original) - The composition of claim 22 wherein ETOH is present at 18.9% and CaCl_2 is present at 23.0 mM both by volume in final concentration.

Claim 24 (original) - The composition of claim 22 wherein ETOH is present at 18.9% and CaCl_2 is present at 5.7 mM both by volume in final concentration.

Claim 25 (previously amended) - The composition of claim 22 wherein CaCl_2 is present at a range between 4.5 mM and 23.0 mM by volume in final concentration.

Claim 26 (original) - An apparatus to prepare thrombin from plasma consisting of:

a reacting chamber to accept CaCl_2 and ethanol, and means for delivery of plasma into said reacting chamber;

a syringe connected to said reacting chamber to receive thrombin from said reacting chamber;

and a filter between said reacting chamber and syringe which is to receive thrombin.

Claim 27 (original) - The apparatus of claim 26 further including glass beads in said reacting chamber.

Claim 53 (original) - The device of claim 18 including a thrombin syringe coupled to said thrombin processing means to receive thrombin therefrom, said thrombin syringe initially ensconced in a bag, and

a clotting and adhesive protein syringe coupled to said clotting and adhesive protein processing means to receive clotting and adhesive proteins therefrom, said clotting and adhesive protein syringe initially ensconced in a bag.

Claim 54 (previously presented) - Thrombin prepared by a process consisting essentially of the steps of:

using ethanol, at a concentration of about 8% to about 20% volume per unit volume, to sequester prothrombin from plasma taken from one person,
converting the prothrombin to thrombin, and
removing particulate material from the thrombin.

Claim 55 (new) - A device for preparing thrombin from a blood product, comprising:

a first vessel having a composition which reacts with blood product, forming thrombin, therein;

means for admitting a blood product into contact with said composition; and

a thrombin receiving instrumentality communicating with said composition and the blood product to receive thus formed thrombin.